REMARKS

Claims 1-27 and 30-33 currently appear in this application. The Office Action of October 26, 2004, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicants respectfully request favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

Election/Restriction

Claims 28 and 29, the non-elected claims, are cancelled by the present amendment.

Drawings

The drawings are objected to under 37 CFR 1.83(a) because they do not show the "additional received unit" of claims 15 and 16.

Submitted herewith is a replacement drawing sheet showing the additional receiver unit at 16'.

Rejections under 35 U.S.C. 112

Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "the sensing surface" of line 1 is said to lack a proper antecedent.

This rejection is respectfully traversed. Claim 23 depends from claim 14, and claim 14 has now been amended to recite "a sensing surface."

Art Rejections

Claims 1, 14, 15 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Somerville et al.

This rejection is respectfully traversed. Somerville et al. disclose a method and apparatus for surveying the velocities of a flow field. This technique uses simultaneous illumination of moving particles suspended in a flow from different directions as the particles pass through an interference pattern formed by the interaction of scanning laser beams.

In contrast thereto, the present invention provides a method and system for detecting objects by detecting reflections (scattering) of incident radiation, coming from within a detecting window, using transmission of incident radiation towards the window with a certain transmitting angle and with a predetermined angular intensity distribution $I(\theta)$ of the incident radiation within this angle. Moreover, the invention uses detection of reflections of incident radiation from the window using a light sensing surface of a predetermined geometry and which has preferably spatially variable sensitivity (*i.e.*, predetermined sensitivity distribution) within this surface selected, in accordance with the geometry of the detecting window (region of interest) and the angular distribution of the incident radiation. This provides for substantially equal output signals of the detector irrespective of the locations within the detecting window in which the reflections are produced. This feature of the invention is recited in claim 6 and is described in the specification as filed on page 3, lines 25-28; page 6, lines 6-11; page 12, lines 19-28; and page 13, line 11 to page 15, line 17. This combination of features is neither disclosed nor suggested in Somerville et al.

Claims 6-8 and 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Somerville et al. in view of Hinoda.

This rejection is respectfully traversed. The present invention uses the detector sensing surface of a predetermined geometry and desirably spatially variable sensitivity (*i.e.*, predetermined sensitivity distribution) defined by a predetermined spatial distribution of a transmission function within the sensing surface, which spatial distribution is selected in accordance with the geometry of the detecting window (region of interest) and the angular distribution of the incident radiation. Different points, or locations, of the detector (its sensing surface) have different light transmission properties with respect to the same frequency range of incident radiation.

Hinoda et al. merely disclose a color sensing device which uses a detector having spectral sensitivity characteristics, which is achieved using an interference filter with a plurality of transmission bands of different central wavelengths.

Combining Somerville et al. and Hinoda et al., even if possible, would not lead to the present invention. Moreover, no motivation is found in Somerville et al. to use the technique of Hinoda et al.

Claims 3, 5 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Somerville et al. in view of DE-4406906, hereinafter REF.

This rejection is respectfully traversed. As noted above, the present invention uses detection of reflections, or scattering, of incident radiation coming from within a detecting window using transmission of incident radiation towards the window with a certain transmitting angle and with

a predetermined angular intensity distribution of the incident radiation within this angle, rather than simultaneous detection, as disclosed in Somerville et al. REF adds nothing to Somerville et al. to render the present claims obvious, as the REF beam shaping element does not change the simultaneous detection of Somerville et al.

Claims 2, 10-12, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Somerville et al.

This rejection is respectfully traversed. Claims 2 and 10-12 depend from claim 1, and claims 16 and 17 depend from claim 14. Claims 1 and 14 have now been amended to recite that the detector has a sensing surface configured with a predetermined geometry and with a desirably spatially variable sensitivity within this surface selected in accordance with the geometry of the detecting window, and the angular intensity distribution of the incident radiation. This feature is nowhere disclosed or suggested in Somerville et al.

Allowable Subject Matter

It is noted that claims 4, 9 and 13 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

It is respectfully submitted that claims 4, 9 and 13 all depend from claim 1. It is believed that claim 1 as amended is now patentable, so there is no reason to rewrite claims 4, 9 and 13.

Prior Art Made of Record

It is noted that the prior art made of record is merely considered pertinent to the present disclosure.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.
Attorneys for Applicant

By: _____
Anne M. Kornbau
Registration No. 25,884

AMK:srd
Telephone No.: (202) 628-5197
Facsimile No.: (202) 737-3528
G:\BN\C\cohn\Frumker1\Pto\AMD 25 APR 05.doc